

APRIL/MAY 2019

**BABC42 — MICROBIOLOGY — II**



Time : Three hours

Maximum : 75 marks

**SECTION A — (10 × 2 = 20 marks)**

Answer ALL the questions.

1. What are the different types of soil?
2. Brief on pore spaces in soil.
3. What do you mean by primary treatment of sewage?
4. Define BOD and COD.
5. Name any two microbes present in milk.
6. What is Pasteurization?
7. Define agglutination and agglomeration.
8. Mention the diseases caused by mycobacteria and *E. histolytica*.
9. Why SCPs are considered superior?
10. What are the advantages of in vivo gene therapy?



SECTION B — ( $5 \times 5 = 25$  marks)

Answer ALL questions.

11. (a) State the types of soil and their characteristics.

Or

- (b) Explain the structure of soil.

12. (a) Describe the biological aspects of sewage treatment.

Or

- (b) Brief a note on the sources of microbes of air.

13. (a) Comment on microbial spoilage of fish.

Or

- (b) Tabulate the physical methods involved in food preservation.

14. (a) How is dermatophytes diagnosed?

Or

- (b) Outline the principle of ELISA.

15. (a) Draw a diagram and explain the structure of a gene.

Or

- (b) How will you produce SCP?

SECTION C — ( $3 \times 10 = 30$  marks)

Answer any THREE questions.

16. Elaborate an essay on bio-fertilizers and their importance.

Write short notes on

- (a) Microbes of oceans  
(b) Distribution of airborne organisms.

18. Discuss in detail the industrial production of microbes

19. Explain the characteristics pathogenicity and prevention of hepatitis.

20. Narrate the steps involved in gene cloning.